DOCUMENT RESUME

ED 366 196 FL 021 754

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TITLE Collocations: Where Grammar and Vocabulary Teaching Meet.
PUB DATE 90
NOTE 17p.; In Sarinee, Anivan, Ed. Language Teaching Methodology for the Nineties. Anthology Series 24; see FL 021 739.
PUB TYPE Viewpoints (Opinion/Position Papers, Essays, etc.) (120) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Computational Linguistics; Foreign Countries; *Grammar; *Language Patterns; *Language Processing; Language Research; Second Language Instruction; *Second Language Learning; *Vocabulary Development; Word Frequency
IDENTIFIERS *Collocations

ABSTRACT

Traditionally, the study of language patterns has been viewed primarily in terms of rules of grammar and discourse and of vocabulary choice. Researchers are now exploring the nature of collocations, or patterns of word sequence or co-occurrence in discourse. Most of the attention has been focused on colorful collocations, not on more ordinary usage. Computer analysis of large corpora now make description of patterns possible. An analysis of the use of four English prepositions ("at, from, between, through") in collocation in one large corpus of British English illustrates the potential of this area of study. Results of the analysis indicate that the prepositions have distinctive patterns of co-occurrence with different form classes (e.g., nouns vs. verbs), and can not be viewed or taught as relatively interchangeable grammatical items. Some problems in interpreting and using collocation analyses persist, such as judgments about significance of word sequences as collocations, and the number of words that can occur between elements of the collocation. However, study of collocations may have implications for theories of language learning, theories and models of language processing, content of language instruction, and pedagogical practice. (MSE)

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COLLOCATIONS: WHERE GRAMMAR AND VOCABULARY TEACHING MEET

GRAEME D. KENNEDY

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COLLOCATIONS: WHERE GRAMMAR AND VOCABULARY TEACHING MEET

Graeme D Kennedy

Language teachers are well aware that fashions or emphases change in their profession every few years. In the last decade or so, for example, there has been a focus at different times on the language learner, on the use of language, on authenticity of the spoken or written texts to which the learner is exposed, on interaction in the learning context, on communicative teaching, and on the teacher as an organizer of opportunities for learning. All of these have been important emphases. But there has also been, to the bewilderment of some language learners, an unwillingness by many teachers in recent years to focus on grammatical form or to analyse the units of the language being learned.

As Sinclair (1985) has written, however, "absence of interest in what one is teaching is surely a perilous condition". Perhaps not surprisingly, therefore, there have recently been calls by applied linguists for a re-examination of the role of grammar in language teaching. At the same time, while the future can hardly be expected to lie in a sterile emphasis on teaching grammar and vocabulary as an unapplied system, neither can language teaching be improved simply by slogans such as 'Grammar is a good thing'. The purpose of this paper is to suggest that text-based pedagogically-appropriate descriptions of language need more emphasis as part of language teacher education in that they properly form part of methodology, informing curriculum designers and classroom teachers not only how a language is put together, but also throwing new light on what some of the units of learning might be. In this sense, more emphasis on pedagogical grammar can complement the greater focus on empirically-based instructional activities or learning tasks, a focus which promises to be important in the years ahead (Crookes, 1986).

The growing availability of microcomputers has begun to make easier the analysis of texts and there are indications that it might be possible to reinterpret what constitutes grammar and vocabulary respectively and thus enhance our understanding of what it is we learn when we learn a language. I am referring, of course, to research on the company words tend to keep, the routines, set phrases or collocations we habitually use when we speak or write.

The mainstream of both theoretical and applied linguistics has been fascinated over the last two or three decades by the generative character of language and especially its creative or innovative nature.

Chomsky, for example, who was probably the greatest single influence, made claims such as the following:

> We constantly read and hear new sequences of words, recognize them as sentences and understand them. It is easy to show that the new events that we accept and understand as sentences are not related to those with which we are familiar by any simple notion of formal (or semantic or statistical) similarity or identity of grammatical frame. (1959: 57)

Chomsky was of course reacting against behaviourist models of learning and especially against Skinnerian notions of verbal chaining. However, not everyone would agree that novelty lies at the heart of language use, and we do not have to go to Skinner for a statement to that effect. For example, that celebrated sailor, novelist and learner of English as a second language, Joseph Conrad, wrote in his great novel *Nostromo:*

> The value of a sentence is in the personality which utters it, for nothing new can be said by man or woman. (1904: 183)

The issue is then - Do we have largely open choice in rule-governed grammatical frames in the words we use, or do we learn and use collocations to a greater extent than is usually recognized? Although behaviourist models of language learning no longer enjoy widespread currency, research on collocations suggests that automaticity or habit formation from an information-processing or skills perspective still has some explanatory power. The extent to which collocations occur also suggests that it may be possible to teach some of what has usually been considered as grammar in terms of vocabulary. Thus, for example, ***at the present time*** can be considered from a grammatical viewpoint to be a prepositional phrase, or it can be viewed as a lexicalized unit which is often synonymous with the word ***now***.

In a statement as well known as that quoted above, Chomsky (1965: 5) characterized so-called traditional grammars as being deficient in that they leave unexpressed many of "***the basic regularities*** of the language with which they are concerned".

Traditionally and conventionally, regularity in language has been seen primarily in terms of rules of grammar (and discourse), and in vocabulary choice. In the last decade, however, a number of researchers have explored the nature of collocations as a particular type of regularity - the occurrence of particular sequence of words in language use by first and second language learners.

Papers by Krashen and Scarcella (1978), Nattinger (1980), Pawley and Syder (1983), Peters (1980) and Sinclair (1987) are among many which have summarized research on collocations and most recently there have been diction-

aries which record or take account of collocations (Benson et al, 1986; Sinclair et al, 1987).

Regrettably there is something of a forest of terminology, much of which overlaps. Researchers have often used different terms, many of which are synonymous, for *collocation*. These include the following (cf. Becker, 1975):

prefabricated routines	(how are you)
prefabricated patterns	(that's a ___)
sentence builders	(that's a ___)
unassimilated fragments	("to meet you" as a greeting)
formulaic speech	(as a matter of fact)
idioms	(kick the bucket)
cliches	(as a matter of fact)
lexicalized sentence stems	(as a matter of fact)
non-canonical forms	(on with the show)
polywords	(the powder room)
phrasal constraints	(by pure coincidence)
deictic locutions	(as a matter of fact)
situational utterances	(I'm glad to meet you)
verbatim texts	(oozing charm from every pore)
fixed phrases	(in brief; at the present time)
set phrases	(in brief; at the present time)

Sometimes, the term "patterned speech" has been used to include all the above. Since it is not the purpose of the present paper to discuss the various varieties of patterned speech, the word *collocation* is used here to include any recurring sequences of words. Suffice to say that whereas some researchers such as Krashen and Scarcella deny that collocations constitute "a large part of language", other researchers such as Pawley, Nattinger and Sinclair have argued that they are overwhelmingly pervasive.

In the research literature, the focus has been on the learning and use in discourse of what are often colourful collocations such as those illustrated. However, little attention has been paid to less striking but no less pervasive patterning throughout the grammar. Yet if the theory of collocation is to work, it has to work at the less striking, more mundane level. For example, English prepositions are considered to be hard to learn and teach, yet ten or twelve prepositions constitute about 10% of any spoken or written text. Computer analysis of large corpora makes possible the description of patterning and indeed shows that it exists to a striking extent at the level of the prepositional phrase. The remainder of this paper presents data from a computer-assisted analysis of the use of four English prepositions, AT, FROM, BETWEEN and THROUGH - part of a study of the ten most frequent prepositions in the LOB (Lancaster-Oslo-Bergen)

corpus (Johansson et al, 1978).

The LOB corpus is a 1-million-word representative sample of adult written British English. It is made up 500 samples, each of 2,000 words from a wide variety of genre. Although the texts in the LOB corpus are now almost 25 years old, it is one of the most accessible databases for computer-assisted analysis and in any case while language changes constantly, it is likely that prepositional usage is more stable than content word usage.

There are about 6000 occurences of AT in the one-million-word LOB corpus. That is 0.6% of the words, or one AT in every 166 words. FROM is slightly less frequent, occurring about once in every 216 words. BETWEEN occurs about once in 1,164 words, while THROUGH occurs about once in 1,314 words.

It is not difficult to find patterning in the use of the prepositions AT, FROM, BETWEEN and THROUGH in the corpus. For example, Table 1 is a rank ordering of the 142 collocations beginning with AT which occur four or more times. They total 2,575 tokens, thus accounting for 43% of the uses of AT in the corpus. Close examination of Table 1 shows that a few collocations occurred with very high frequency; others, marked with an asterisk, probably reflect the particular texts in the corpus or do not seem to be formulaic (eg ***at the Tate Gallery***); still others, while apparently formulaic, did not occur very often (eg ***at the most*** occurred only four times).

A further 932 tokens of AT occurred before the names of towns, institutions or events (eg ***at Ascot***) but because none of these individual place names occurred four or more times, they are not listed in Table 1. Similarly, there were 236 tokens in the corpus of AT followed by personal pronoun (eg ***at her***, ***at him***). If these names of towns, institutions or events and the various personal pronouns are treated as allomorphs of collocations (AT + (THE) + PROPER NOUN DENOTING PLACE) and (AT + PERSONAL PRONOUN) then the total number of collocations beginning with AT occurring four or more times as listed in Table 1 would be 3,743, or 63% of the tokens in the corpus.

Thus, in a single table, almost two thirds of the collocations beginning with AT in a representative sample of written British English can be indicated. As Table 1 shows, ***at least*** was the most frequent collocation, while others of less frequency such as ***at the tailplane*** may not be formulaic at all. Such a table may be of use to curriculum designers in checking the coverage of materials for language teaching, but is probably not of major theoretical interest.

It is, of course, possible to provide similar tables for each of the other prepositions. In this paper, however, it will be of more value to compare the four prepositions with regard to the left and right collocations they are associated with. Such a comparison shows that to treat these prepositons grammatically as roughly substitutable parts of speech can be very misleading. Yet most grammars of English do assume that English prepositions behave in a similar

Table 1 Right collocations of AT arranged in order of frequency

at least	249	*at the hotel	7
at + numeral	181	*at a temperature (of)	7
at all	175	*at a meeting (of)	6
at last	111	at any moment	6
at once	98	at best	6
at the same time	92	at dawn	6
at the end (of the)	86	*at his desk	6
at home	83	at rest	6
at the time	77	at stake	6
*at which	61	*at technical colleges	6
at present	57	at the edge (of)	6
at first	50	at the sound (of)	6
at any rate	34	at the thought (of)	6
at night	34	*at Manchester	6
at the moment (of)	34	*at Oxford	5
at the top	31	*at Covent Garden	5
at times	30	*at Christmas	5
at the beginning (of)	30	=: *the turn of	5
at this time	28	*at the school	5
at work	26	at the wheel	5
at the meeting (of)	25	at the worst	5
at that time	24	*at the India Office	5
at the age of	24	*at the July meeting	5
at the back (of)	22	*at the church	5
at any time	21	at the close of	5
at the bottom (of)	20	at the cost of	5
at the present time	20	at the far end	5
at about ___	19	at the first	5
at the expense of	19	*at the gate	5
at school	18	at the rear (of)	5
at this stage	18	at heart	5
at this point	17	at most	5
at one time	17	at right angles	5
at a point	15	at a later date	5
at length	15	at a rate of	4
at the head of	15	at a later stage	4
*at the same ___	15	at a loss	4
at the side (of)	14	at all costs	4
*at the door	14	at all levels	4
at a time	13	at arm's length	4
at a time when	13	*at around ___	4
*at Cambridge	13	at college ___	4
*at what	12	at each other	4
at the point (of)	12	at fault	4
*at the University	11	at high temperatures	4
at dinner	11	at low temperatures	4
at that moment	11	*at his feet	4
at. (clause final)	10	at its best	4
at hand	10	at long last	4
at large.	10	at midnight	4
at that.	10	at peace	4
at the foot (of)	10	at the base (of)	4
at the start	10	*at the dance	4
at the surface	10	*at the election	4
*at various ___	9	*at the hospital	4
at random	9	*at the house	4
at xxx	9	at the last moment	4
at the front (of)	9	at the most.	4
at xxxx	9	*at the level of	4
at first sight	9	at the ready	4
at all times	8	at the root (of)	4
at a cost of	8	*at the other	4
at intervals	8	*at Eton	4
at the office	8	at the way	4
at the rate (of)	8	*at the tailplane	4
at this moment	8	*at the Foreign Office	4
*at London Airport	8	*at the Tate Gallery	4
at the table	7	*at universities	4
at the weekend	7	at will	4
at the centre (of)	7	at one point	4
at the corner (of)	7	at one.	4
at one end (of)	7		
at the heart of	7	Total	2,575

fashion, differing mainly in their so-called locative meanings.

Tables 2 and 3 compare the right and left collocations of the four prepositions. The rank ordering of the words which occur most frequently before and after the four prepositions are not strictly comparable because the preposition AT, for example, is much more frequent than BETWEEN or THROUGH and therefore the actual number of tokens of the collocations in each category are themselves not strictly comparable. To assist comparisons, therefore, a line is drawn across each column at approximately the point where a collocation occurs once in every 200 instances (or 0.5%) of that preposition. It is immediately apparent, for example, in Table 2, that whereas AT occurs in twenty right collocations which have a frequency greater than 0.5%, FROM has only three right collocations with comparable frequency, and only *from time to time* among these seems lexicalized. AT collocates strongly with certain preceding and following words, whereas BETWEEN and THROUGH tend to collocate most strongly with preceding words, as a comparison of Tables 2 and 3 shows.

A particularly striking point to note in Table 3 is that the prepositions can differ markedly not only in the particular lexical items which precede or follow them, but also in the parts of speech which the collocating items represent. Thus, as Table 3 shows, the most frequent words immediately preceding BETWEEN are nouns (eg *difference*, *relationship*). The most frequent words preceding THROUGH are typically verbs (eg *go*, *pass*, *come*).

From the evidence for these four prepositions , they cannot be taught as grammatical items which can be substituted for each other, differing only in the basic locative meaning in each case.

In fact, the basic locative meanings of AT, FROM, BETWEEN and THROUGH do not notably stand out in the most frequent collocations which these four prepositions form part of. In English language teaching, however, it is the basic locative meanings which normally constitute the main pedagogical focus.

Text-based descriptions of the company kept by individual prepositions can also indicate the relative frequency of recurrent patterns of words and this should influence the work of curriculum designers and classroom teachers. For example the basic locative use of AT followed by a noun which is part of something occurs 281 times in the LOB corpus, (about 5% of the occurrences of AT). These are listed alphabetically in Table 4. However, not all are of equal likelihood of occurrence, as Table 4 shows.

Tables 2 Comparison of rank ordering of right collocations

least	249
(personal pronoun)	236
(number)	181
all	175
last	111
once	98
the same time	92
the end (of the)	88
home	83
the time	77
which	61
present	57
first	50
any rate	34
night	34
the moment	34
the top	31
times	30
the beginning (of)	30
this time	28
work	26
the meeting	25
that time	24
the age of	24
the back (of)	22
any time	21
the bottom (of)	20
the present time	20
about	19
the expense of	19
school	18
this stage	18
this point	17
one time	17
a point	15
length	15
the head of	15

from (personal pronoun)	252
(number)	165
time to time	34
(clause final)	30
being	20
London	18
the first	17
about	16
outside	14
behind	13
home	12
school	11
the start	11
early	10
the beginning	10
the fact that	10
the window	10
the point of view of	8
the top	8
all over	7
going	7
having	7
here	7
the house	7
the outset	7
there	7
under	7
all parts	6
the back	6
the end	6
the moment	6
within	6
year to year	6
abroad	5
a number of	5
the kitchen	5

between (number)	96
(pers.pronoun)	73
the two	37
(place) and (place)	22
two	17
(date) and (date)	12
(clause final)	9
these two	6
the various	6
earnings	4
thumb and forefinger	3
kin	3
different	3
now and	3
road and	3
any two	2
changes	2
home and	2
jobs	2
management and	2
members	2
objects	2
people	2
phenomena	2
private and	2
the ages of	2
the bars	2
the lines	2
the parties	2
the type of	2

through. (clause final)	70
(pers.pronoun)	47
(person's name)	17
the window	15
to	14
(number)	12
(place)	8
(her) mind	7
with	7
the door	6
the house	5
the trees	5
her hair	4
each point	3
lack of	3
the ages	3
the books	3
the day	3
the town	3
the years	3
a door	2
fear	2
his fingers	2
his teeth	2
life	2
negotiations	2
Parliament	2
prayer	2
several editions	2
the centuries	2
the doorway	2
the eyes of	2
the foyer	2
the good offices of	2
the influence of	2
the meal	2
the motions	2
the street	2

Table 3 Comparisons of rank ordering of left collocations

look (v.)	at	201	away	from	136	difference	between	59	go	through	36
be		195	come		110	relationship		25	pass		33
and		111	apart		99	distinction		19	come		20
that		51	and		62	relation		16	be		15
stare (v.)		49	far		50	gap		12	and		13
up		45	be		47	agreement		11	get		12
arrive		44	derive		37	contrast		11	break		10
not		43	range		35	distance		11	run		10
but		35	up		33	place		11	him		10
it		35	arise		30	be		10	way		9
down		34	back (adv.)		29	exist		9	it		8
(number)		32	obtain		26	comparison		9	fall		7
live		30	it		25	meeting		9	lead		7
glance		29	take		24	contact		8	look (v.)		7
out		29	out		21	link		8	out		7
or		28	vary		22	in		7	in		6
aim		26	off		22	and		7	live		6
smile		26	him		22	lie (v.)		6	them		6
have		25	different		21	conflict		6	only		6
look (n.)		24	draw		21	correlation		6	all		5
make		24	free		21	gulf		6	carry		5
do		24	learn		21	time		6	down		4
man		23	rise		21	as		6	right		4
back (adv.)		23	result		21	that		6	or		4
him		22	make		19	connection		5	cut		4
stand		21	suffer		19	interval		5	flash		4
time		21	but		19	distinguish		5	see		4
stay		20	differ		18	pass		5	shoot		4
year		20	her		18	agree		5	one		4
her		19	home		18	out		4	line		4
here		19	way		18	border		4	me		3
house		19	down		17	exchange		4	progress		3
			remove		17	proportion		4	obtain		3
			them		17	quarrel		4	peer		3
						similarity		4	read		3
						space		4	shine		3
						struggle		4	for		3
									but		3

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Table 4 AT + THE + noun which is part of something

	No. tokens
back	22
base	4
bottom	20
centre	7
corner	7
door	14
edge	6
end	88
foot	10
front	9
head	15
heart	7
point	12
rear	5
side	14
surface	10
top	31
	281

Similarly, Table 5 shows what is perhaps really a commonsense patterning in the rank ordering of the occurrence of personal pronouns after the four prepositions, but one which shows that BETWEEN behaves somewhat differently from the other three, in that plural pronouns are most frequent after BETWEEN.

Table 5 Rank ordering of occurrences of personal pronouns following AT, FROM, BETWEEN and THROUGH

AT		FROM		BETWEEN		THROUGH	
him	67	it	29	them	36	it	12
her	58	him	28	us	13	him	7
me	41	her	18	her	5	them	6
it	39	them	16	him	4	her	2
them	15	me	15	you	3	me	1
you	10	you	4	it	3	you	1
us	6	us	3	me	1	us	0

The data in Table 6 shows quite striking differences in the part of speech likely to occur immediately before each of the four words. THROUGH, for example, shows verbs as the most frequent category, whereas the other three show nominals as the most frequent, most strikingly so in the case of BETWEEN. FROM is less likely than the other words to begin a sentence or clause, although as Table 2 shows FROM, BETWEEN and THROUGH often end a sentence or clause.

Table 6 **Parts of speech occurring immediately before AT, FROM, BETWEEN and THROUGH**

	% of tokens			
	AT	FROM	BETWEEN	THROUGH
Nouns or pronouns	41.6	45.0	66.2	28.7
Verbs	31.6	29.3	16.2	44.0
Adjectives	3.1	4.8	1.7	3.4
Other P.O.S.	16.7	17.2	10.1	15.0
Clause initial	7.0	3.7	5.7	8.9

In spite of the information which can be found by studying collocations in corpora, there are nevertheless some major problems in interpreting and using such information as is found in Tables 1-5. First, while there are some word sequences which we can be confident are lexicalized as a single unit (eg *at the moment*), there are other sequences which, while occurring reasonably frequently, do not have such a strong sense of belonging together (eg *from the outside*). On the other hand, there are others which occur in a particular corpus perhaps only once or twice, yet are recognized by users of the language as familiar or formulaic. Table 7 contains some such examples of collocations with AT.

Without psycholinguistic research, it is of course not possible to make valid judgements about which word sequences are significant as collocations and which are not.

Second, some collocations can be discontinous and therefore the study of recurring adjacent sequences alone is not enough to get a picture of how frequent a particular collocation really is. In the following sentence from the LOB

Table 7 Collocations with AT which occur infrequently in the LOB corpus

is not to be sneezed at	1
there is no chance at all	1
in no time at all	5
some at least of	1
for me at any rate	2
none at all	1
love at first sight	2
if at all	4
make yourself at home	1
what you are driving at	1
it was really no problem at all	1
what on earth was he playing at	1
near at hand	4
what is at stake	2
he was upset at being	1
yet, at the same time,	4
significant at the n% level	4

corpus, for example, six words come between *different* and *from*.

> Non-cooperators were not *different* in age or other environmental factor *from* the rest.

In the corpus, the word *different* occurs 364 times. On 21 occasions, it is immediately followed by *from*; on another eight occasions *different* has one intervening word before *from*; on two occasions there are two intervening words; once each there are three or four intervening words; and twice there are six. On 329 occasions, *different* is not followed by *from* at all.

Examination of discontinuous collocations suggests that a search of up to about five places either side of a key word is necessary to get a reasonably accurate picture of the frequency of a particular collocation. Simple computer programmes which identify a key word or node in context typically highlight words immediately adjacent to the right or left of the key word. It is also possible, however, to get the programmes to identify discontinuous collocations in text.

Even more striking than the possible discontinuity in collocations is the fundamental issue of the different functions of formally identical collocations. Consider the collocation *at the turn of* in Table 1. It is shown as occurring five times. These tokens were as follows:

1. at the turn of a knob
2. at the turn of the stairs
3. at the turn of the path
4. at the turn of the century
5. at the turn of Leo's key.

Semantically these have been little in common. In context, the first is an adverbial of manner. The second and third are locative, while the last two temporal.

Similarly, ***at once*** occurs 98 times in Table 1. Close examination of the collocations in context, however, shows that there are two quite different functions.

1. immediately (eg I replied at once)
2. simultaneously (eg I can't be everywhere at once).

In the LOB corpus, 89 out of the 98 tokens of ***at once*** mean *immediately*, and the remaining nine are used to mean ***simultaneously***.

Collocations, of course, are frequently made up of more than two words. As noted above, FROM is immediately preceded by ***different*** on 21 occasions. In the case of fifteen of these occurrences, there is a preceding quantificational word showing a tendency to hyperbole, as Table 8 shows.

Table 8 Words which precede *different from* in the LOB corpus

	No. of tokens
very different from	3
so different from	3
fundamentally different from	2
little different from	1
too different from	1
completely different from	1
significantly different from	1
totally different from	1
utterly different from	1
essentially different from	1
	15

A similar tendency to hyperbole is seen with *support from* which occurs 9 times. Five of the nine words which precede *support* are *little, influential, utmost, unanimous, energetic*.

A further example of how statistical information on collocations might provide insights into the dimensions of the language learner's task can be seen in the adjectives which typically precede each of the four prepositions discussed in this paper. Table 9 contains the examples which occurred two or more times.

Not only are the adjectives or quantifiers almost entirely different, but there are also striking differences in the actual numbers of adjectives which occur before each preposition. ***Available*** and ***far*** are the only adjectives in the table which precede more than one of the prepositions.

It should be clear, then, that computer-based analysis of text can provide striking, often previously unknown information about the way a language fits together - something which is not grammar in the sense usually used by linguists because collocational studies go beyond systemic possibility by adding a statistical aspect, an aspect based on actual use.

The data described in this paper is of course indicative rather than comprehensive and ways of exploiting such information for language teaching are not yet clear. It does seem, nevertheless, that some items that have usually been considered pedagogically from a grammatical perspective can be treated more as vocabulary. There are several possibilites. In terms of approach, experiential teaching methods are already established as important for the teaching of both grammar and vocabulary. Interactional activities requiring, for example, the matching of collocations with glosses are consistent with communicative language teaching procedures. Cloze exercises which are often used for both vocabulary and grammar teaching can encompass collocations - the focus being on both form and meaning.

Reading activities can also be important for learning collocations. Texts for reading are often selected or modified on orthodox vocabulary grounds and there is typically some gradation or sequencing of grammar teaching. Systematic exposure to the most frequent lexicalized collocations could be another criterion.

There is another approach to the learning and teaching of prepositions which needs considering in light of the data I have described. If little of the richness and complexity of English prepositional use is captured by teaching prepositions as grammar, perhaps they should not be taught at all, but rather left to be absorbed through language experience, recognizing nevertheless that experiential learning, while natural, is not necessarily time efficient. That is a question which can of course be resolved only by more systematic research into the effects of different pedagogical practices.

What text-based collocational studies do suggest is that the description of grammar is, from the teacher's point of view, an essential part of methodology, but it needs to be based on more than the orthodox grammatical and lexical

Table 9 Adjective-preposition collocations

-AT		-FROM		-BETWEEN		-THROUGH	
present	10	far	50	far	3	all	5
good	10	different	21			available	2
more	8	free	21				
available	5	absent	11				
old	5	remote	8				
active	4	safe	5				
alone	4	clear	5				
high	4	distinct	5				
open	4	apparent	4				
significant	4	exempt	4				
hard	3	effective	3				
little	3	evident	3				
outstanding	3	forthcoming	3				
possible	3	fresh	3				
straight	3	immune	3				
useful	3	isolated	3				
aghast	2	available	2				
agreed	2	attractive	2				
alarmed	2	best	2				
brown	2	distant	2				
cheap	2	distinguish-					
clear	2	able	2				
important	2	indistinguish-					
mad	2	able	2				
necessary	2	due	2				
repayable	2	inseparable	2				
sad	2	familiar	2				
strong	2	obvious	2				
uncomfortable	2	latest	2				
usual	2	necessary	2				
warm	2						

description. Just as the teacher of botany does not take students into the jungle and expect them to learn about all the plants by simply being exposed to them, so the language curriculum designer and classroom teacher can facilitate learning by systematic presentation of the role of important language items and their linguistic ecology - the company words keep.

Whether we learn and use prepositions as parts of collocations or routines than as grammatical devices differing only on semantic grounds cannot be of course resolved on the basis of the data I have described. But we can be sure that there are more regularities in prepositional use than it has hitherto been possible to demonstrate, and that habit formation as part of language learning need not be inconsistent with post-behaviourist learning models. The study of collocations may thus have implications for our theories of language learning and for theories and models of language processing, as well as for the content of language teaching syllabuses, and pedagogical practices.

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